

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of the claims in the present application.

Listing of Claims:

Claims 1-8 (cancelled).

9. (Currently Amended) A device for classifying at least one object in a surrounding field of a vehicle, comprising:
- an environmental sensor system; and
 - a classifier that classifies the at least one object into one of a plurality of classes including object classes and a reject class, based on a three-dimensional shape of the at least one object and dimensions of the object, the environmental sensor system ascertaining the shape and the dimensions, wherein the classifier performs temporal filtering in classifying the at least one object by taking into consideration a previous classification of the at least one object, and wherein each object class has assigned properties which describe at least one of characteristic features of the class and differences from other classes, the properties of the object classes being stored in a model database, and wherein the at least one object is classified as belonging to the reject class if the at least one object does not correspond to any of the properties of the object classes stored in the model database.
10. (Previously Presented) The device as recited in claim 9, wherein the classifier is configured to take into account, during the classification, a velocity of the at least one object according to at least one of magnitude and a direction.
11. (Previously Presented) The device as recited in claim 9, wherein the classifier is configured to take into account, during the classification, an orientation of the at least one object.
12. (Previously Presented) The device as recited in claim 9, wherein the classifier is configured to check validity of the classification using data from a database.

13. (Previously Presented) The device as recited in claim 9, wherein the device is coupled to at least one vehicle system in such a manner that the device controls the at least one vehicle system as a function of the classification.
14. (Previously Presented) The device as recited in claim 13, wherein the vehicle system is a protection system.
15. (Previously Presented) The device as recited in claim 13, wherein the vehicle system is a driver-assistance system.
16. (Previously Presented) The device as recited in claim 9, wherein the environmental sensor system includes at least one of a stereoscopic camera, a monoscopic camera having a stereo motion sensor, a LIDAR sensor, and a scanning radar sensor.